

## IN THE CLAIMS

1. (currently amended) ~~An immunogenic~~ A composition comprising two or more components wherein each component consists of a substantially pure gonococcal antigen selected from the group consisting of: (1) an Outer Membrane Protein A (OmpA) protein; (2) an Outer Membrane Protein H (OmpH) protein; (3) a peptidyl-prolyl cis/trans isomerase (PPIase) protein; (4) an ngs41 protein; (5) an ngs117 protein; and (6) an adhesion penetration protein (App) protein,  
  
wherein the OmpA protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:2,  
  
wherein the OmpH protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:3,  
  
wherein the PPIase protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:4,  
  
wherein the ngs41 protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:5,  
  
wherein the ngs117 protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:6; and  
  
wherein the App protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:7.
2. (currently amended) The ~~immunogenic~~ composition of claim 1, ~~comprising an OmpA protein~~, wherein the composition comprises the OmpA protein ~~comprises~~

- ~~an amino acid sequence having 70% or more identity to SEQ ID NO:2.~~
3. (withdrawn-currently amended) The ~~immunogenic~~ composition of claim 1,  
~~comprising an OmpH protein,~~ wherein the composition comprises the OmpH  
protein ~~comprises an amino acid sequence having 70% or more identity to SEQ~~  
~~ID NO:3.~~
  4. (currently amended) The ~~immunogenic~~ composition of claim 1, ~~comprising a~~  
~~PPIase protein,~~ wherein the composition comprises the PPIase protein ~~comprises~~  
~~an amino acid sequence having 70% or more identity to SEQ ID NO: 4.~~
  5. (withdrawn-currently amended) The ~~immunogenic~~ composition of claim 1,  
~~comprising an Ngs41 protein,~~ wherein the composition comprises the Ngs41  
protein ~~comprises an amino acid sequence having 70% or more identity to SEQ~~  
~~ID NO:5.~~
  6. (withdrawn- currently amended) The ~~immunogenic~~ composition of claim 1,  
~~comprising an Ngs117 protein,~~ wherein the composition comprises the Ngs117  
protein ~~comprises an amino acid sequence having 70% or more identity to SEQ~~  
~~ID NO:6.~~
  7. (withdrawn- currently amended) The ~~immunogenic~~ composition of claim 1,  
~~comprising an App protein,~~ wherein the composition comprises the App protein

~~comprises an amino acid sequence having 70% or more identity to SEQ ID NO:~~  
~~7.~~

8. (withdrawn) A hybrid polypeptide of formula  $\text{NH}_2\text{-A-}\{-\text{X-L-}\}_n\text{-B-COOH}$ ,  
wherein: each X is an amino acid sequence as defined in any one of claims 2 to 7;  
L is an optional linker amino acid sequence; A is an optional N terminal amino  
acid sequence; B is an optional C terminal amino acid sequence; and n is 2, 3, 4,  
5, 6, 7, 8, 9, 10, 11, 12, 13 14 or 15.
9. (withdrawn) Nucleic acid encoding the hybrid polypeptide of claim 8.
10. (withdrawn) A lipidated gonococcal OmpA protein.
11. (withdrawn) A lipidated gonococcal PPIase protein.
12. (withdrawn) A dimeric gonococcal OmpH protein.
13. (withdrawn) A dimeric gonococcal PPIase protein.
14. (withdrawn) A gonococcus strain, wherein one or more of the following  
gonococcal antigens is knocked out: (1) OmpA; (2) OmpH; (3) PPIase; (4) ngs41;  
(5) ngs117; and (6) App.

15. (currently amended) ~~An immunogenic~~ A composition, comprising [[an]] a substantially pure OmpA protein and a substantially pure PPIase protein,  
wherein the OmpA protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:2; and  
wherein the PPIase protein comprises an amino acid sequence having 70% or more identity to SEQ ID NO:4.
16. (currently amended) The ~~immunogenic~~ composition of claim 15  
wherein the OmpA protein comprises an amino acid sequence having 80% or more identity to SEQ ID NO:2; and  
wherein the PPIase protein comprises an amino acid sequence having 80% or more identity to SEQ ID NO:4.
17. (currently amended) The ~~immunogenic~~ composition of claim 15  
wherein the OmpA protein comprises an amino acid sequence having 90% or more identity to SEQ ID NO:2; and  
wherein the PPIase protein comprises an amino acid sequence having 90% or more identity to SEQ ID NO:4.
18. (currently amended) The ~~immunogenic~~ composition of claim 15  
wherein the OmpA protein comprises an amino acid sequence having 95% or more identity to SEQ ID NO:2; and  
wherein the PPIase protein comprises an amino acid sequence having

95% or more identity to SEQ ID NO:4.

19. (currently amended) The ~~immunogenic~~ composition of claim 15  
wherein the OmpA protein comprises the amino acid sequence shown in  
SEQ ID NO:2; and  
wherein the PPIase protein comprises the amino acid sequence shown  
in SEQ ID NO:4.